BRUHATH BANGALORE MAHANAGARA PALIKE

RAJARAJESHWARINAGARA ZONE

Name of work: Detailed Estimate for Providing and laying HDPE Water line in Chanappa Garden and Sundara Nagara Block-2 in J P Park, Ward No 17.

Sl. No.	Description	Unit	Dimensions				Est. Cost in Lakhs :		49.90
			No.	L.	B.	D	Qty.	Rate	Amount
1	KSRB : **Earth work excavation** for foundation of buildings, culverts, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in **Hard soil** not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. after breaking of clods complete as per specifications. (Page No.5, Item No. 2.4 of KPWD SR 2013-14)								
	Asphalt Road	**Cum**	1	685.00	0.45	1.00	308.25		
	Concrete Road		1	1850.00	0.45	1.00	832.50		
	Asphalt Cross Cutting		116	7.50	0.45	1.00	391.50		
	Concrete Cross Cutting		240	4.00	0.45	1.00	432.00		
						Total	**1964.25**	**227.88**	**447613.00**
	Basic Rate	**211.00**							
	Area weightage @ 8%	16.88							
	Total	**227.88**							
2	KSRB13-9.1 : Providing and fixing to wall, ceiling and floor **High Density Polyethylene Pipes** 6.00 kgf/sq.cm working pressure **90mm outside diameter,** compression type fittings, wall clips, making good the wall, ceiling and floor, including cost of all materials, labour charges, HOM of equipments and testing excluding cost of fittings, complete as per specifications. Specification No.KBS 13.2.1 5.2 1 13.9 (I-13.73.3 P-102 of KPWD SR 2013-14)								
	For Main Line	**Rmtr**	1	2535.00			2535.00		
						Total	**2535.00**	**501.12**	**1270339.00**
	Basic Rate	**464.00**							
	Area weightage @ 8%	37.12							
	Total	**501.12**							
3	KSRB13-9.1 : Providing and fixing to wall, ceiling and floor **High Density Polyethylene Pipes** 10.00 kgf/sq.cm working pressure **25mm outside diameter,** compression type fittings, wall clips, making good the wall, ceiling and floor, including cost of all materials, labour charges, HOM of equipments and testing excluding cost of fittings, complete as per specifications. Specification No.KBS 13.2.1 5.2 1 13.9 (I-13.76 P-103 of KPWD SR 2013-14)								
	Left side	**Rmtr**	178.0	6.00			1068.00		
	Right side		178.0	9.00			1602.00		
						Total	**2670.00**	**106.92**	**285476.00**
	Basic Rate	**99.00**							
	Area weightage @ 8%	7.92							
	Total	**106.92**							

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	Description	Unit	Dimensions				Qty.	Rate	Amount
			No.	L.	B.	D			
4	KSRB13-3.2 : Providing and fixing in trenches **galvanised / mild steel tubes** (medium grade) **20mm dia** nominal bore with all fittings (earth work in trenches to be measured and paid for separately) including cost of all materials, labour charges, HOM of equipments and testing complete as per specifications. Specification No.KBS 13.2.14 / 13.6 (I-13.11, P- 95 of KPWD SR 2013-14)								
	For Delivery at End	**Rmtr**	356.0	1.20			427.20		
						Total	**427.20**	**197.64**	**84432.00**
	Basic Rate	**183.00**							
	Area weightage @ 8%	14.64							
	Total	**197.64**							
5	Providing and fixing 25mm dia nipple, complete as per specifications. (Page XXXVIII of KPWD SR 2013-14)								
		Nos	1	356.00			356.00		
						Total	**356.00**	**32.10**	**11428.00**
	Basic Rate	**32.10**							
	Total	**32.10**							
6	Providing and fixing reducer elbow 25mm to 20mm complete as per specifications. (Page XXXVIII of KPWD SR 2013-14)								
		Nos	2	356.00			712.00		
						Total	**712.00**	**41.00**	**29192.00**
	Basic Rate	**41.00**							
	Total	**41.00**							
7	Providing and fixing 20mm dia nipple, complete as per specifications. (Page XXXVIII of KPWD SR 2013-14)								
		Nos	1	356.00			356.00		
						Total	**356.00**	**21.00**	**7476.00**
	Basic Rate	**21.00**							
	Total	**21.00**							
8	Providing and fixing HDPE 90 x 32mm saddle with brass nuts and bolts including cost of all materials, labour charges, HOM of equipments and testing excluding cost of fittings, complete as per specifications.								
		Nos	2	356.00			712.00		
						Total	**712.00**	**350.00**	**249200.00**
	Quatation Rate	**350**							
9	Providing and fixing 20mm dia union, complete as per specifications. (Page XXXVIII of KPWD SR 2013-14)								
		Nos	1	356.00			356.00		
						Total	**356.00**	**54.45**	**19384.00**
	Basic Rate	**54.45**							
	Total	**54.45**							

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	Description	Unit	Dimensions				Qty.	Rate	Amount
			No.	L.	B.	D			
15	KSRRB M400- **Wet Mix Macadam** KSRRB M400-17. Providing, laying, spreading and compacting graded stones aggregate to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 (I-20.18 P-170 of KPWD SR 2013-14)								
	Asphalt Road	**Cum**	1	685.00	0.45	0.25	77.06		
	Asphalt Cross Cutting		116	7.50	0.45	0.25	97.88		
						Total	**174.94**	**1121.04**	**196112.00**
	Basic Rate	**1038.00**							
	Area weightage @ 8%	83.04							
	Total	**1121.04**							
16	KSRRB 500- Primer Coat/Tack Coat KSRRB M500-6. Providing and applying **Primer Coat** with bitumen emulsion on prepared surface of granular base including clearing of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications. MORTH Specification No. 502 (I-21.6 P-175 of KPWD SR 2013-14)								
	Asphalt Road	**Sqm**	1	685.00	0.45		308.25		
	Asphalt Cross Cutting		116	7.50	0.45		391.50		
						Total	**699.75**	**44.28**	**30985.00**
	Basic Rate	**41.00**							
	Area weightage @ 8%	3.28							
	Total	**44.28**							
17	KSRRB 500-Bituminous macadam KSRRB 500-11. Providing and laying **Bituminous Macadam** on prepared surface with crushed coarse aggregates as per design mix formula for base / binding course including loading of aggregates with F.E. loader, hot mixing of stone aggregates and bitumen in hot mix plant 40 tonne capacity, transporting the mixed material in tipper to paver and laying mixed materials with paver finisher to the required level and grade, rolling by power roller to achieve the desired density, 50 /75mm compacted thickness with 3.3% bitumen but excluding cost of primer / tack coat with lead upto 1km including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH /Chapter 5 60/70 grade bitumen (I-21.11.2, P-176 of KPWD SR 2013-14)								
	Asphalt Road	**Cum**	1	685	0.45	0.05	15.41		
	Asphalt Cross Cutting		116	7.50	0.45	0.05	19.58		
						Total	**34.99**	**6733.80**	**235599.00**
	Basic Rate	**6235.00**							
	Area weightage @ 8%	498.80							
	Total	**6733.80**							
18	KSRRB 500-7. Providing and applying **Tack Coat** on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH/Chapter 5 (I-21.7, P-176 of KPWD SR 2013-14)								

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	Description	Unit	Dimensions				Qty.	Rate	Amount
			No.	L.	B.	D			
	Asphalt Road	Sqm	1	685.00	0.45		308.25		
	Asphalt Cross Cutting		116	7.50	0.45		391.50		
						Total	699.75	17.93	12545.00
	Basic Rate	16.60							
	Area weightage @ 8%	1.33							
	Total	17.93							
19	KSRRB M500-18. Providing and laying **Semi Dense Bituminous Concrete** with 100-120 TPH batch type HMP producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder at 4.0 to 4.5% by weight of total mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 500.8 complete in all respects as per specifications. 25-30mm compacted thickness with 5% bitumen 60/70 grade (Grading II) (I-21.20.2, P-178 of KPWD SR 2013-14)								
	Asphalt Road	Cum	1	685.00	0.45	0.03	7.71		
	Asphalt Cross Cutting		116	7.50	0.45	0.03	9.79		
						Total	17.49	9767.52	170871.00
	Basic Rate	9044.00							
	Area weightage @ 8%	723.52							
	Total	9767.52							
20	KSRB 4-1.2 : Providing and laying in position plain cement concrete of mix **M10** with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregtes @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2 (I-4.2 P-12 of KPWD SR 2013-14)								
	Concrete Road	Cum	1	1850.0	0.45	0.10	83.25		
	Concrete Cross Cutting		240	4.0	0.45	0.10	43.20		
						Total	126.45	4497.12	568661.00
	Basic Rate	4164.00							
	Area weightage @ 8%	333.12							
	Total	4497.12							
21	KSRB 4-1.5 : Providing and laying in position plain cement concrete of mix **M20** with OPC cement @ 300kgs, with 20mm and down size graded granite metal coarse aggregates @0.64cum and fine aggregtes @ 0.43cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation,plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2 (I-4.5 P-12 of KPWD SR 2013-14)								
	Concrete Road	Cum	1	1850.0	0.45	0.15	124.88		
	Concrete Cross Cutting		240	4.0	0.45	0.15	64.80		
						Total	189.68	5323.32	1009701.00

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	Description	Unit	Dimensions				Qty.	Rate	Amount
			No.	L.	B.	D			
	Basic Rate	4929.00							
	Area weightage @ 8%	394.32							
	Total	5323.32							
22	Conveying the excavated earth silt debris and over burden earth etc., to a lead of upto 9 to 10 Kms distance by using private vehicle this includes the cost of loading and unloading charges etc., complete								
	Asphalt Road	Cum	1	685.00	0.45	0.30	92.48		
	Concrete Road		1	1850.00	0.45	0.25	208.13		
	Asphalt Cross Cutting		116	7.50	0.45	0.30	117.45		
	Concrete Cross Cutting		240	4.00	0.45	0.25	108.00		
						Total	526.05	94.82	49882.00
	Basic Rate	87.80							
	Area weightage @ 8%	7.02							
	Total	94.82							
23	Miscellaneous and other unforseen charges							L.S.	3391.00
							TOTAL	RS.	4990000.00
	(Rupees Forty Nine Lakhs Ninty Thousand only)								

CERTIFICATE

1) The work spot has been inspected and the work is found to be necessary.
2) This estimate is prepared as per C.S.R. of 2013-14 and as per rate analysis.
3) The provisions were made in this estimate are necessary and adequate.
4) This works come under B.B.M.P. limits.

Asst.Engineer
Ward no.17

Assistant Executive Engineer
Yeshwanthpura Sub-Division
Bruhat Bengaluru Mahanagara Palike

Executive Engineer
R.R.Nagara Division
Bruhat Bengaluru Mahanagara Palike

ADMINISTRATIVE APPROVED

Rs : 49,90,000/- (Forty nine lakh Ninty thousand) is accorded under the head : .....

By AC (R.R.N.) : Sl.No.2248

Vide Register Page No. 238-239 subject to conditions contained in enclosed memo No. : AS/2248/13-14 Date : 17/09/13

TA, AC (R.R.N.)

TECHNICAL SANCTION

Rs: 49,90,000/- (Fourty Nine Lakhs Ninety Thousand only) is accorded under the head: .....

By CE (R.R.N.): Sl.No 295 Pg No. 90

Registered as CE (R.R.N) No: 295 subject to conditions contained in enclosed memo No: 295/13-14 Date: 18/09/13

TA, CE (R.R.N.)

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